DP-303157

IN THE CLAIMS

1. (Currently Amended) A catalyst substrate for use with a catalytic converter, comprising:

a catalyst substrate material comprising an inlet, an outlet, an opening for ~~the~~ passage of exhaust gas therethrough, and comprising a catalyst and zirconium phosphate.

2. (Original) The catalyst substrate of Claim 1, wherein said zirconium phosphate is a layer disposed on at least part of said catalyst substrate material.

3. (Currently Amended) A catalytic converter, comprising:

a catalyst substrate comprising a catalyst and zirconium phosphate;

a shell having an opening for ~~the~~ passage of exhaust gas therethrough, wherein said shell is concentrically disposed around said catalyst substrate; and

a mat support material disposed between said catalyst substrate and said shell, and concentrically around said catalyst substrate.

4. (Currently Amended) The catalytic converter of Claim 3, wherein said zirconium phosphate is a layer on at least part of said ~~the~~ catalyst substrate.

5. (Original) The catalytic converter of Claim 3, further comprising an exhaust system component secured to at least one end of said shell.

6. (Original) The catalytic converter of Claim 5,wherein said exhaust system component is selected from the group consisting of an endcone, an endplate, an exhaust manifold assembly, an exhaust pipe, a connecting pipe, a mounting flange, and combinations comprising at least one of the foregoing components.

7-14. (Canceled)

DP-303157

15. (New) A catalytic converter, comprising:

a substrate comprising cordierite;

a zirconium phosphate layer disposed on said substrate;

a catalyst layer disposed on said zirconium phosphate layer; and

a shell disposed around said substrate.

16. (New) The catalytic converter of Claim 15, wherein the substrate further comprises zirconia.

17. (New) The catalytic converter of Claim 15, wherein said catalyst layer comprises a catalyst material selected from the group consisting of platinum, palladium, rhodium, iridium, osmium, ruthenium, tantalum, zirconium, yttrium, cerium, nickel, copper, and oxides, mixtures, and alloys comprising at least one of the foregoing.

18. (New) The catalytic converter of Claim 15, wherein said zirconium phosphate has a thickness of up to about 10 nanometers.

19. (New) The catalytic converter of Claim 18, wherein said thickness is up to about 4 nanometers.

20. (New) A catalyst substrate for use with a catalytic converter, comprising:

a substrate material comprising cordierite;

a zirconium phosphate layer disposed on said substrate material; and

a catalyst layer disposed on said zirconium phosphate layer.

21. (New) The catalytic converter of Claim 20, wherein the substrate material further comprises zirconia.

DP-303157

22. (New) The catalytic converter of Claim 20, wherein said catalyst layer comprises a catalyst material selected from the group consisting of platinum, palladium, rhodium, iridium, osmium, ruthenium, tantalum, zirconium, yttrium, cerium, nickel, copper, and oxides, mixtures, and alloys comprising at least one of the foregoing.

23. (New) The catalytic converter of Claim 20, wherein said zirconium phosphate has a thickness of up to about 10 nanometers.

24. (New) The catalytic converter of Claim 23, wherein said thickness is up to about 4 nanometers.

25. (New) The catalyst substrate of Claim 2, wherein said catalyst is a layer disposed on said zirconium phosphate layer.

26. (New) The catalytic converter of Claim 4, wherein said catalyst is a layer disposed on said zirconium phosphate layer.